AMENDMENTS TO THE CLAIMS:

Claims 1-58 (cancelled)

- 59. (Previously presented) A method of inducing apoptosis in mammalian cancer cells comprising exposing mammalian cancer cells to an effective amount of monoclonal antibody which (a) binds to Apo-2 polypeptide consisting of the contiguous amino acid residues 1 to 411 of SEQ ID NO:1 and (b) stimulates apoptosis in at least one type of mammalian cancer cell in vivo or ex vivo.
- 60. (Previously presented) The method of claim 59 wherein said antibody comprises a single-chain antibody.
- 61. (Previously presented) A method of treating mammalian cancer cells comprising exposing mammalian cancer cells to an effective amount of monoclonal antibody which (a) binds to Apo-2 polypeptide consisting of the contiguous amino acid residues 1 to 411 of SEQ ID NO:1 and (b) stimulates apoptosis in at least one type of mammalian cancer cell in vivo or ex vivo.
- 62. (Previously presented) The method of claim 61 wherein said antibody comprises a single-chain antibody.

Claims 63-64 (Cancelled)

- 65. (Previously presented) A method of inducing apoptosis in mammalian cancer cells comprising exposing mammalian cancer cells to an effective amount of monoclonal antibody which (a) binds to a soluble extracellular domain sequence of an Apo-2 polypeptide consisting of amino acids 54 to 182 of SEQ ID NO:1 and (b) stimulates apoptosis in at least one type of mammalian cell in vivo or ex vivo.
- 66. (Previously presented) A method of inducing apoptosis in mammalian cancer cells comprising exposing mammalian cancer cells to an effective amount of monoclonal antibody which (a) binds to a soluble extracellular

domain sequence of an Apo-2 polypeptide consisting of amino acids 1 to 182 of SEQ ID NO:1 and (b) stimulates apoptosis in at least one type of mammalian cell in vivo or ex vivo.

- 67. (Previously presented) A method of treating mammalian cancer cells comprising exposing mammalian cancer cells to an effective amount of monoclonal antibody which (a) binds to a soluble extracellular domain sequence of an Apo-2 polypeptide consisting of amino acids 54 to 182 of SEQ ID NO:1 and (b) stimulates apoptosis in at least one type of mammalian cell in vivo or ex vivo.
- 68. (Previously presented) A method of treating mammalian cancer cells comprising exposing mammalian cancer cells to an effective amount of monoclonal antibody which (a) binds to a soluble extracellular domain sequence of an Apo-2 polypeptide consisting of amino acids 1 to 182 of SEQ ID NO:1 and (b) stimulates apoptosis in at least one type of mammalian cell in vivo or ex vivo.
- 69. (Previously presented) The method of claim 59, 65, or 66, wherein said antibody is a chimeric antibody.
- 70. (Previously presented) The method of claim 59, 65, or 66, wherein said antibody is a humanized antibody.
- 71. (Previously presented) The method of claim 59, 65, or 66, wherein said antibody is a human antibody.
- 72. (Previously presented) The method of claim 59, 65, or 66, wherein said antibody comprises an Fab fragment.
- 73. (Previously presented) The method of claim 59, 65, or 66, wherein said antibody comprises a scFv fragment.
- 74. (Previously presented) The method of claim 59, 65, or 66, wherein said antibody comprises a F(ab')2 fragment.

- 75. (Previously presented) The method of claim 59, 65, or 66, wherein said antibody binds to the same epitope as the epitope to which the monoclonal antibody produced by the hybridoma cell line deposited as ATCC accession number HB-12456 binds.
- 76. (Currently amended) The method of claim 59, 65, or 66, wherein said antibody comprises one or more complementary determining region (CDR) amino acid sequences of the 16E2 antibody shown in Figure 16 (SEQ ID NO:9).
- 77. (Currently amended) The method of claim 59, 65, or 66, wherein said antibody comprises one or more complementary determining region (CDR) amino acid sequences of the 20E6 antibody shown in Figure 16 (SEQ ID NO:10).
- 78. (Currently amended) The method of claim 59, 65, or 66, wherein said antibody comprises one or more complementary determining region (CDR) amino acid sequences of the 24C4 antibody shown in Figure 16 (SEQ ID NO:11).
- 79. (Previously presented) The method of claim 59, 65, or 66, wherein said antibody is fused to an epitope tag sequence.
- 80. (Previously presented) The method of claim 59, 65, or 66, wherein the cancer cells are colon or colorectal cancer cells.
- 81. (Previously presented) The method of claim 59, 65, or 66, wherein the cancer cells are lung cancer cells.
- 82. (Previously presented) The method of claim 59, 65, or 66, wherein the cancer cells are breast cancer cells.
- 83. (Previously presented) The method of claim 61, 67, or 68, wherein said antibody is a chimeric antibody.
- 84. (Previously presented) The method of claim 61, 67, or 68, wherein said antibody is a humanized antibody.

- 85. (Previously presented) The method of claim 61, 67, or 68, wherein said antibody is a human antibody.
- 86. (Previously presented) The method of claim 61, 67, or 68, wherein said antibody comprises an Fab fragment.
- 87. (Previously presented) The method of claim 61, 67, or 68, wherein said antibody comprises a scFv fragment.
- 88. (Previously presented) The method of claim 61, 67, or 68, wherein said antibody comprises a F(ab')2 fragment.
- 89. (Previously presented) The method of claim 61, 67, or 68, wherein said antibody binds to the same epitope as the epitope to which the monoclonal antibody produced by the hybridoma cell line deposited as ATCC accession number HB-12456 binds.
- 90. (Currently amended) The method of claim 61, 67, or 68, wherein said antibody comprises one or more complementary determining region (CDR) amino acid sequences of the 16E2 antibody shown in Figure 16 (SEQ ID NO:9).
- 91. (Currently amended) The method of claim 61, 67, or 68, wherein said antibody comprises one or more complementary determining region (CDR) amino acid sequences of the 20E6 antibody shown in Figure 16 (SEQ ID NO:10).
- 92. (Currently amended) The method of claim 61, 67, or 68, wherein said antibody comprises one or more complementary determining region (CDR) amino acid sequences of the 24C4 antibody shown in Figure 16 (SEQ ID NO:11).
- 93. (Previously presented) The method of claim 61, 67, or 68, wherein said antibody is fused to an epitope tag sequence.

- 94. (Previously presented) The method of claim 61, 67, or 68, wherein said mammalian cancer cells are exposed to chemotherapy or radiation therapy.
- 95. (Previously presented) The method of claim 61, 67, or 68, wherein the cancer cells are colon or colorectal cancer cells.
- 96. (Previously presented) The method of claim 61, 67, or 68, wherein the cancer cells are lung cancer cells.
- 97. (Previously presented) The method of claim 61, 67, or 68, wherein the cancer cells are breast cancer cells. --